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BANKS AS BLOCKHOLDERS *

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Abstract

In this paper, we analyze the effects of banks as main blockholders on a firm's returns and on the concentration of ownership in the hands of the controlling blockholders. Compared with previous studies, we approach to this problem by taking into consideration the type of blockholders building up coalitions with banks for controlling a firm. This allows us to reconcile different results, reported in relevant literature, on the impact of banks' ownership of a firm on its returns. In short, we argue that the effect is only negative when banks are the main blockholders or when they build up coalitions with other banks. We prove empirically our theoretical contentions making use of a sample of Spanish firms for the period 1996-2000.

Keywords: Corporate governance, main blockholders, financial institutions

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1. INTRODUCTION

Recently, the literature on ownership structure has broadened its main focus by considering not only agency problems between managers and shareholders ², but also those conflicts that emerge between large shareholders and minority shareholders (Gomes and Novaes, 2001; Bloch and Hege, 2001; Zwiebel, 1995; Pagano and Röel, 1998). Large shareholders want to gain control in order to enforce decisions that give them some separate rents (*private benefits of control*) at the expense of minority shareholders. Thus, the investigation of internal as well as external mechanisms to prevent this kind of behavior is a major issue. In this paper, we focus on internal mechanisms and we study how specific characteristics of blockholders affect the firm's returns.

The literature on this subject departs from a vision of ownership concentration which comprises one major blockholder and a diverse group of small shareholders (Shleifer and Vishny, 1986; Demsetz and Lehn, 1985 and Berglöf, 1990). In this context is not possible to address strategic issues like the formation of coalitions between the main blockholders and their effects on a firm's policy. Fortunately, this shortcoming has been overcome in some recent papers (Bloch and Hege, 2001; Gomes and Novaes, 2001; Bennedsen and Wolfenzon, 2000) and books (Morck, 2000), by modelling the presence of different blockholders in concentrated ownership structures. Common factor in all these studies is the emergence of different effects that may protect minority shareholders from expropriation by main blockholders. In particular, two opposite effects are described. Firstly, a *bargaining effect* that accounts for the difficulty in reaching agreements among different main blockholders that require a firm to follow specific and, in some occasions, opposite policies in order to enjoy particular private benefits of control. These value-decreasing policies, when they are mutually exclusive, come out as an implicit protection for the minority. Secondly, a *disagreement effect* which is related to the difficulty in agree on investments in some positive net present value projects. This underinvestment problem generally appears when a large number of blockholders control a firm.

Recently, in Spain there has been some debate about the advantages and disadvantages of having “*núcleos duros*”, that means, groups of stable blockholders that control a firm. At the very centre of this debate is the role played by financial institutions ³ within these “*nucleos duros*”. This paper is an attempt to shed some light on the effects of a bank's ownership on a firm's returns by focusing on the type of controlling coalitions that banks can form with other blockholders.

Spain comes out to be an interesting case in point, because traditionally banks have had a significant presence in a firm's ownership. Recently enacted European rules, together with the

deregulation of Spanish financial system has amplified this phenomenon. Banks face more pressure from the financial markets and they have widened their traditional lending-borrowing activities to others like asset management and underwriting share issues. Within this context, banks' ownership in a particular firm may be interpreted as evidence of their commitment to that firm. This may convince small investors to become shareholders in these firms via mutual funds or by buying shares issued by bank-backed companies. Obviously, this is of major interest for minority-expropriating banks. However, financial market pressure tends to hinder banks impulses to expropriate because the minority shareholders always retain the option to take their investment elsewhere with minor costs. Thus, within this setting a major issue is to examine the final effect of banks as blockholders on a firm's returns.

The literature on this subject has not yet reached a consensus on the effect of institutional ownership on a firm's returns. There are some papers that find a negative effect (Hellwig, 1998; Morck, et al, 2000; Giner and Salas, 1997; and Goergen *et al.*, 2003). Other papers do not find a clear-cut relationship (Prowse, 1992; Zoido, 1998, using accounting measures). Finally, there is a strand of the literature that describes a positive relationship, (Cable, 1985; Gorton and Schmid, 2000; Boehmer 2000; and Zoido, 1998 ⁴), Hence, the debate is open and there is no conclusive evidence on what the real effect could be.

This paper contributes to this debate by typifying a firm's main blockholders (individual, corporations, families, banks) together with their stockholdings. The aim is to inspect whether the coalitions of banks with other specific blockholders is the ultimate determinant of banks effect on a firm's profitability. Our conjecture is that, structures that contain combinations of banks, independently of the stake, are particularly harmful because of their strong tendency to expropriate to minority shareholders. This is so for three reasons. Firstly, there is a natural convergence of interests among banks over the definition of policies in order to enjoy greater private benefits of control. Secondly, banks can easily reach a consensus because they can choose from a wide range of possible actions that bring these private benefits. These include the ability to oblige a firm to buy several services (insurance, payments management, ...) at prices above market rates. Lastly, banks may also control a firm, although do not hold a significant stake, by acting as representatives of other minority shareholders. This allows them to bear low costs derived from their expropriating activities.

By the same token, when the other blockholders that collude with banks to control a firm are more heterogeneous, there is lower incentive to expropriate. In that case, the presence of banks may not be so damaging to a firm's returns.

We test our theoretical contentions by carrying out an empirical investigation with a sample of Spanish firms for the period 1996-2000. We find that the results, making use of accounting data as well as market data, confirms in essence our main conjecture: A bank as the main blockholder, especially in concert with other banks, has a negative impact on a firm's returns. Also, we find that these coalitions formed by banks have lower stakes. This is a clear signal that these kind of coalitions aims to expropriate. They minimize their expropriating costs by reducing their controlling stake.

The remainder of the paper is organized as follows. Section 2 develops the theoretical underpinnings as well as the hypotheses to be tested. In Section 3, some descriptive analysis is shown. Section 4 displays the econometric study. In section 5, an analysis of robustness is carried out making use of market data. The paper ends with some final remarks.

2. THEORETICAL UNDERPINNINGS

When different blockholders control a firm, the process of decision-making is influenced by different effects. First, there is a *bargaining effect*, which is positive-, and reflects the possible difficulties that a set of blockholders may face when to agree on expropriating the minority. This is especially relevant when the main blockholders are not homogeneous as their particular interests are more difficult to converge. This feature protects the minority from the expropriating actions of the main blockholders. The second effect is the *disagreement effect*. This is responsible for the rejection of some positive net present value (NPV) projects because of the difficulty in getting blockholders to agree on several value-enhancing actions. This is the "negative side" of disagreement (Gomes and Novaes 2001).

Within this scheme, it is in the interest of main blockholders to design controlling structures with high enough homogeneity so as to agree on positive NPV projects that generate private benefits at the expense of minority shareholders. Natural candidates for these homogeneous structures are those comprising banks. They are three factors that may justify banks' expropriating behavior, together with other banks as a firm's main blockholders. First, banks are relatively homogeneous institutions, this is especially so for those that participate in a firm's ownership. This favors a consensus on the actions to achieve private benefits. Second, they can also overcome potential disagreements with other blockholders to expropriate minority shareholders, because they have access to a wide range of perquisites, such as the management of a firm's payments or the supply of services like insurance or consultancy at a premium above the market price. And finally, they internalize a low proportion of the expropriating costs because they may control a firm with a low stake. Banks, in general, have more power than that derived from their stakes because they hold the representation of some minority

shareholders who have close links (*i.e.* long-term depositors). This provides banks with more muscle to influence a firm's decisions in the direction of their own interests.

Along these lines, Hellwig (1998) shows how banks tend to collude with a firm's executive board members against non-executive members who are, in principle more eager to protect minority blockholders. Also, Goergen *et al* (2003) finds that those firms with banks in their ownership structure pay lower dividends. This is a signal of banks expropriating intentions. However, Edwards and Nibler (2000), shows that although banks may influence corporate governance, in practice, they do not play a role in the governance of large German firms which is distinct from that of other types of large shareholders. Our argument is that this may only be true when banks collude with other types of blockholders to control a firm, but not when they collude with other banks.

The combination of the previous features leads us to propose as our main theoretical contention that *when banks are the main blockholders, there is more willingness to expropriate minority shareholders. This is especially true when banks collude with other banks.*

This kind of bank expropriating behavior should be reflected in the stake of the controlling blockholders as well as on a firm's returns. We are going to test our main theoretical contention making use of these variables.

- Banks are expected to control the firm (and undertake expropriating actions) with as low a stake as possible. This is to minimize expropriating costs necessary to fully enjoy private benefits. Thus, what is optimal for a firm's main blockholders is to retain the lowest possible controlling stake (close to 50%).

In this way, we expect small blockholders' stake in those bank-controlled firms as a signal of the banks eagerness to expropriate a firm's minority. And, this signal should be especially clear when blockholders are homogeneous (bank-bank) rather than heterogeneous (bank-non-bank). Thus, we can state the following hypothesis:

Hypothesis 1: *The controlling stake of a firm with banks as main blockholders is lower than that of those other firms without banks in their ownership structure. This is especially clear when both main blockholders are banks.*

We can extract two consequences from hypothesis one.

First, the presence of a bank as a firm's main blockholder can be interpreted in terms of willingness to expropriate the minority. Thus, other banks may use this information to their own advantage and may participate in these kinds of firms. The natural convergence of expropriating

objectives when both controlling blockholders are homogeneous reinforces this outcome. Thus, *we expect a bank to form coalitions with other banks as a firm's main blockholders.*

The second consequence of the controlling coalition low stake, when it is composed of banks, refers to the relative difference between the stakes of the two main blockholders. This difference should decrease with the overall blockholders' stake (Bloch and Hege, 2001). We call this effect, the *stake effect*. This negative relationship may be justified because being the second in a coalition of two blockholders is like having an implicit option of becoming the controlling main shareholder in the future. From this view point, when the stake of the two main blockholders is low (the case of coalitions of bank-bank), it may make perfect sense for the second blockholder to have a significantly lower stake than that of the main shareholder. In this case, this low stake has a high option value because there is still a significant probability to become the main blockholder in the future by negotiating with minority shareholders.

However, opposite to this *stake effect*, there is another effect, *expropriating effect*. This emerges when we take into consideration our main theoretical contention, that is, the high eagerness of banks to expropriate minority shareholders. In this situation, when both blockholders are banks, we expect that the homogeneity in their type should be translated into similarity in the size of the stakes. Otherwise, there is high blockholder competition to win minority favour (Bloch and Hege, 2001) and, consequently, less scope to expropriate minority shareholders. This cannot be compatible with a highly expropriating environment which is what we expect when there are two banks as main blockholders. In conclusion, *when the expropriating effect is higher (lower) than the stake effect, those coalitions of two banks as main blockholders should be more (less) symmetric in their stakes than their counterparts with only one bank or no banks at all.*

- A second dimension that is worth exploring, in connection with our main theoretical contention, is a firm's returns. There is not consensus on the effect of bank stockholding on a firm's returns. Several studies like Giner and Salas (1997), for Spain; Morck *et al* (2000) ⁵; Weinstein and Yafeh (1998) ⁶, for Japan, suggest the existence of a negative relationship. Other studies, like Zoido (1998) making use of a sample of Spanish listed firms; Cable, (1985), Gorton and Schmid, (2000) for Germany; and Hoshi *et al.* (1990, 91) for Japan, show the existence of a positive relationship. Finally, there are papers like Zoido (1998) ⁷ for Spain, and Prowse (1992) ⁸ for Japan where no clear-cut relationship is found.

In order to reconcile this wide range of results our conjecture is to incorporate the type of blockholder accompanying banks in the controlling coalition as the ultimate determinant of the effect of bank's ownership on a firm's returns.

There are different reasons why banks may have a positive effect on a firm's return. First, they are specialist in monitoring and can save monitoring costs by bearing this responsibility on behalf of other shareholders (Diamond, 1984). Second, they are stable blockholders and may provide firms with some hedging against different types of shocks (Allen and Gale, 2001; Von Thadden, 1995). Third, banks when combining their role as shareholders with that of debtholders may be more willing to renegotiate debt contracts when a firm has some financial difficulties (Berlin *et. al*, 1996).

Also, there are other reasons that may justify a negative relationship. First, they reduce managerial entrepreneur incentives (Gertner *et al.*, 1994). And second, banks may translate their high bargaining power, as lenders, to reduce firm's investment intensity (Rajan, 1992), and as blockholders, to extract some private benefits of control at the expense of the minority.

Our contention is that the negative expropriating incentives may outweigh the previous positive effects when banks are allied with other banks to control a firm. We provided above three reasons for such a result, when we explained banks expropriating eagerness. Also, the reduction in the stake of banks as controlling blockholders that we expect (hypothesis 1) should reinforce the negative impact of banks as blockholders in coalition with other banks, on a firm's returns. Therefore, we propose:

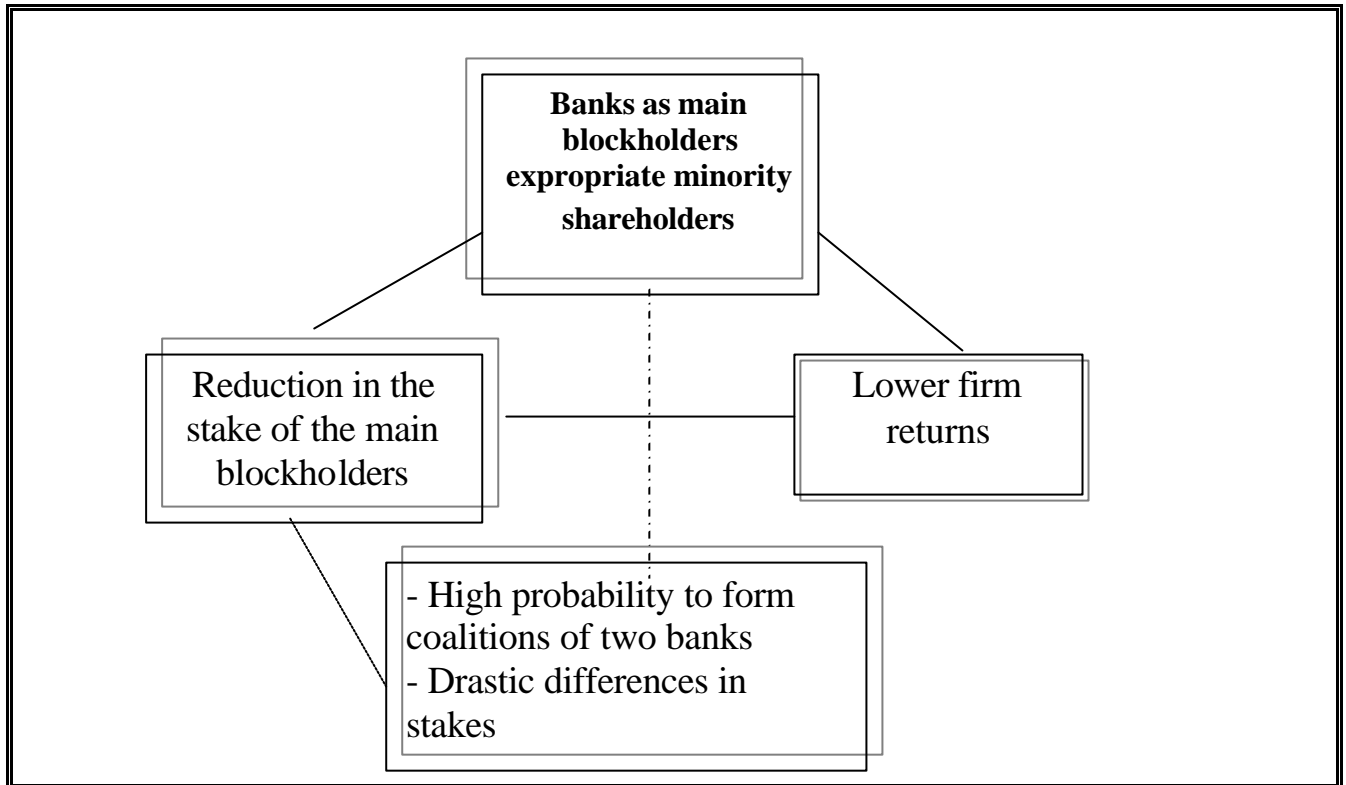
Hypothesis 2A: The presence of banks as blockholders, especially, when part of homogeneous structures with other banks, may have a harmful effect on a firm's returns.

Finally, once we compare heterogeneous blockholder structures composed of banks and non-banks, we expect different results contingent on the type of main blockholders. In particular, structures with a bank as the leading shareholder should generate more intensive expropriating policies in comparison to those coalition structures with a bank as the second main blockholder. In the former case, a bank as a leader has high bargaining power, especially when the stake they are representing is taken into consideration. This allows them to impose expropriating actions and bypassing contrary opinions from other non-bank blockholders in this heterogeneous structure. This is consistent with what Boehmer (2000) finds making use of a sample of German bidder firms. This author finds that takeovers only increase the value of an acquiring firm that has banks as blockholders, if bank control is counterbalanced by another large shareholder. Also, Boehmer's study shows that the worst takeovers are completed by firms that are majority-controlled by financial institutions. This is precisely what we state in the following hypothesis:

Hypothesis 2B: In heterogeneous controlling structures composed of banks and non banks as blockholders, the presence of a bank as the largest blockholder is especially negative for a firm's returns.

As a final synthesis, the scheme that we have in mind is as follows:

SCHEME 1



3. DATA BASE AND DESCRIPTIVE ANALYSIS

3.1. The Data

We carry out our empirical analysis making use of a sample of firms for the period 1996-2000. This sample is extracted from the SABE database (Sistema de Análisis de Balances de Empresas Españolas). This database is composed of more than 200,000 Spanish firms and it is compiled by Bureau Van Dijk. It provides annual information of balance sheet, income statements and other complementary information like a firm's ownership. It covers companies of all sizes and all economic sectors. We have focused on those firms with information of their ownership and that have been filtered⁹. The final outcome is an unbalanced panel data of 4,435 firms with 12,629 observations.

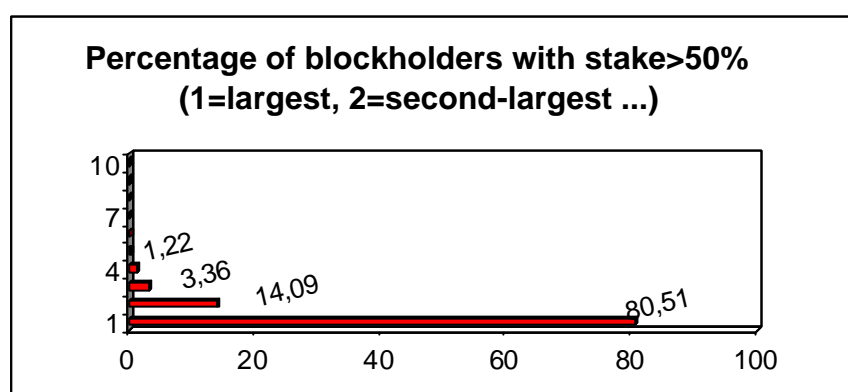
It is worth noting that in 25.94% of the cases there is only one blockholder, and in 64.65% the main shareholder has control (with a stake higher than 50%). This is preliminary evidence of the high ownership concentration of Spanish firms, which is in line with what other authors have found (Crespi, 1998; Galvé and Salas, 1994). In the next section, we present more detailed information on the ownership structure of Spanish firms emphasizing the role played by banks.

3.2. Descriptive Evidence

A/ Ownership structure of Spanish firms: The presence of banks

To begin with, we present some evidence of the average number of blockholders required to control a firm (Figure 1). We find that in most of the cases (80.5%) a single shareholder has a sufficiently large stake to control a firm. And, only in 5.40% of the total cases, more than two blockholders are required to ensure a firm's control. Also, the average stake of the main shareholder is 68.96% while that of the second main shareholder is 11.94%. Hence, it makes perfect sense to focus on the two main shareholders as a firm's controlling blockholders ¹⁰.

FIGURE 1



Figures 2 and 3 show the distribution and type of the two main shareholders. We can appreciate the relevance of cross-shareholdings among firms (in 88% of the cases, the main blockholder is another firm, and in 81% of the companies the second main blockholder is also a firm). Also, there is an important presence of individuals in a firm's ownership, which corresponds to family-owned firms¹¹. Finally, financial institutions show some presence, 2% of the cases as the main shareholders and 5% as the second main shareholder.

FIGURE 2

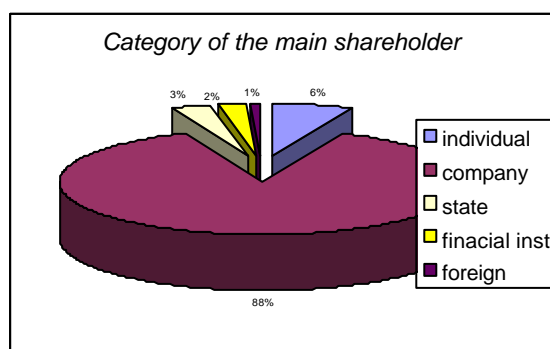
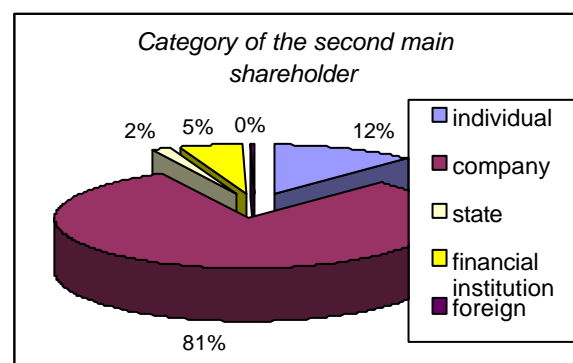


FIGURE 3



FIRMS WITH BANKS AS MAIN SHAREHOLDERS

Once we focus on those firms with financial institutions holding one of the two main stakes (2,76% of the firms), Table I shows its distribution divided between banks and Saving & Loans :

TABLE I
PERCENTAGE OF FIRMS WITH FINANCIAL INSTITUTIONS AS SHAREHOLDERS

	MAIN SHAREHOLDER	SECOND MAIN SHAREHOLDER	ONE OF THE TEN LARGEST SHAREHOLDERS
FINANCIAL INSTITUTION	1,44% (182 obs.)	1,32% (167 obs.)	3,83% (484 obs.)
Banks	61,54%	58,68%	
Saving & Loans	38,46%	41,32%	

We find that the presence of banks is limited (484 observations), and in 70% of these cases, a financial institution is also one of the two main shareholders. Thus, we can state that financial institutions have controlling ambitions when they decide on becoming a blockholder. And, by type, banks have more presence than Saving & Loans as main blockholders.

A more detailed analysis by size of those companies that have banks as one of their ten largest blockholders is displayed in Table II. Company size is defined taking into account the number of employees: small less than 50; medium, between 50 and 200 and large, more than 200.

Table II

SIZE DISTRIBUTION OF FIRMS WITH FINANCIAL INSTITUTIONS AS SHAREHOLDERS

	SMALL	MEDIUM	LARGE
FINANCIAL INSTITUTION	26.03%	30.17%	43.8%
BB=1	23,68	23.68	52.63
BNB=1	40.28	39.58	20.14
NBB=1	13.95	31.01	55.04
NBNB=1	42.88	41.36	15.76

See BOX I for the definition of BB, BNB, NBB and NBNB.

Table II shows that financial institutions prefer to invest in large firms, especially when they are the second-largest blockholder (NBB=1) or when they are accompanied by other banks as the two main shareholders (BB=1). Note that in large firms there is separation of ownership and control and the potential expropriation problem seems to be more relevant.

Considering the analysis by sector (not reported), we have found that financial institutions invest especially in the housing sector where structure BB=1 appears in 63.16% of the cases. This sector in Spain is linked to the possibility of important perquisites. Housing is tied to different economic activities, a factor that makes it attractive to furthering a particular blockholder's individual interest.

Summing up, we have found that financial institutions seem to participate in those firms and in those sectors where we can expect expropriation problems to be more severe.

B/ Banks in coalitions of main blockholders

Having investigated the type of firms where financial institutions hold stakes, we move a step further inside the firm to describe the type of coalitions that banks ¹² form with other blockholders in order to control a firm. In BOX I, we define the variables that characterize those different coalitions between the two main blockholders.

BOX I

Types of coalitions among the two main blockholders	
Bank1	Dummy variable that is equal to 1 if the main shareholder is a bank, and 0 otherwise.
Bank2	Dummy variable that is equal to 1 if the second-largest shareholder is a bank, and 0 otherwise.
BB=1	Dummy variable that is equal to 1 if the two largest shareholders are banks, and 0 otherwise.
BNB=1	Dummy variable that is equal to 1 if the main shareholder is a bank but the second largest is not a bank, and 0 otherwise.
NBB=1	Dummy variable that is equal to 1 if the second-largest shareholder is a bank but the largest one is not a bank, and 0 otherwise.
NBNB=1	Dummy variable that takes value 1 if two main shareholders are not banks, and 0 otherwise.

In Table III, we separate the frequency of appearance of those different coalitions that involve banks as one of the two main blockholders.

TABLE III
TYPE OF STRUCTURES WITH BANKS
AS THE TWO MAIN BLOCKHOLDERS

	% Total sample
BB=1	0.3% (38 firms)
BB=0	97% (12591 firms)
BNB=1 or NBB=1	2.16% (273 firms)
BNB=1	1.14% (144 firms)
NBB=1	1.02% (129 firms)

See Box I for the definition of variables

We observe that there are more firms with a bank as the main shareholder, than as the second largest one. These results reveal, consistently with what we have mentioned before, that financial institutions prefer to adopt a controlling role when they decide participating in a firm's ownership.

Along these lines, it is worth checking whether the presence of a bank lures other banks to become one of a firm's blockholders. Table IV addresses this issue and computes conditional probabilities of the presence of banks depending on another bank's presence.

TABLE IV
CONDITIONAL PROBABILITIES OF A BANK PRESENCE
DEPENDING ON ANOTHER BANKS PRESENCE ¹

	Bank1=1	Bank1=0	P-value ²
Probability of Bank2=1 if	20.8%	1.04%	(0.00)
	Bank2=1	Bank2=0	
Probability of Bank1=1 if	22.75%	1.15%	(0.00)

¹ See Box I for the definition of variables

² We have conducted Mann-Whitney tests.

Table IV clearly shows that the presence of a bank in a firm's ownership structure, independently of whether it is the main or the second largest shareholder, triggers other banks to also become significant blockholders. Thus, it seems that banks tend to form coalitions with other banks rather than with non-banks. We may interpret, relying on our theoretical underpinnings, that this may reflect the greater eagerness to expropriate of banks as blockholders in homogenous structures (BB=1). The presence of banks seems to be a signalling to other banks of the possibility to undertake expropriating action. This result is going to be confirmed in the econometric analysis.

C/ Banks stockholdings

As mentioned in the theoretical section, the potentially expropriating behavior of banks should be reflected in two dimensions: The main blockholder's stake and the firm's returns. Thus, it is worth studying the main blockholders stake of firms where banks are blockholders and compare it with those that are not.

Table V

PERCENTAGE OF OWNERSHIP HOLD BY THE TWO LARGEST SHAREHOLDERS

	TOTAL SAMPLE			FIRMS WITH AT LEAST ONE BANK AS A SHAREHOLDER			FIRMS WITH A BANK AS THE LARGEST SHAREHOLDER		
	TOTAL	SMALL ²	LARGE ²	TOTAL	SMALL ²	LARGE ²	TOTAL	SMALL ²	LARGE ²
1ST SHOLDER ¹	68.97	67.21	74.81***	47.5	52.4	39.46***	53.2	65.8	28.69***
2ND SHOLDER ¹	11.95	12.82	9.49***	12.8	13.3	12.1	11.3	11.5	13.05
OWN2 ³	80.92	80.03	84.30***	60.3	65.7	52.56***	64.5	77.3	41.74***

¹*** 99% of statistical significance of the mean comparing large and small firms.

² Small less than 50 employees; Large, more than 200 employees.

³ OWN2 is the sum of the stakes of the two main shareholders

Table V shows that the two main blockholder's stake for those firms that have banks as shareholders (60.3%) is significantly lower than that for the average firm (80.92%). This is especially true for large firms, and also when a bank is the main shareholder. In that case the two main shareholder's stake is 41.74% whereas for the average firm is 84.3%. These results seem to be consistent with the idea that banks tend to expropriate and reduce their stake in order to minimize expropriation costs.

When we focus on different combinations of blockholders among the two main ones, Table VI shows that a coalition of both banks (BB=1) has a lower stake than combinations of banks with non-banks, and this latter stake is also lower than that of coalitions composed of non-banks as shareholders (81.33%). All this is consistent with our theoretical contentions.

TABLE VI

MEASURES OF THE STAKE OF THE MAIN BLOCKHOLDERS

	BB=1	BNB=1	NBB=1	NBNB ³
OWN2 ¹	48.39	68.65	64.87	81.33
OWN1 ²	39.54	56.75	52.86	69.37

¹ OWN2 is the sum of the stakes of the two main shareholders

² OWN1 is the stake of the main shareholder

³ We have conducted Mann-Whitney tests and all are significantly lower than NBNB

Finally, we move a step further, and inspect the distribution of the stake between the two main blockholders. Table VII reports these figures for different coalitions of main blockholders.

TABLE VII
DIFFERENCES IN THE OWNERSHIP BETWEEN THE TWO LARGEST SHAREHOLDERS ¹

	BNB OR NBB		BB	NBNB=1	P-value
DIFOWN ²	0.56		0.44	0.67	0.00
	BNB	NBB			
DIFOWN ²	0.55	0.58			
					0.56

¹ See BOX 1 for the definition of the variables

² DIFOWN is the ratio of the difference between the stakes of the two largest to the sum of that stakes.

From Table VII we can state that there is more symmetry in the stake of the two main shareholders when both of them are banks than in other combinations of blockholders. This result ensures that the *expropriating effect*, as we called it in the theoretical section, is higher than the *stake effect*. This latter effect (Bloch and Hege, 2001), should justify larger relative differences between the stakes of blockholders in coalitions with an overall low stake (*i.e.* BB=1). This represents additional evidence of the banks' eagerness to expropriate in controlling coalition with other banks.

D/ The effects of bank ownership on ROA

In this section, we conduct an analysis of a firm's returns, contingent on the presence of banks in its ownership structure. We use two measures to characterize a firm's returns: ROA (return on assets) and the Q-ratio (it means market-to-book ratio). As controlling structure, we take the combination of non-banks (NBNB).

TABLE VIII
MEASURES OF A FIRM'S RETURNS FOR DIFFERENT COALITIONS
AMONG THE MAIN BLOCKHOLDERS

	BB=1 ^{3,4}	BNB=1 ^{3,4}	NBB=1 ^{3,4}	NBNB ^{3,4}
ROA1 ¹	9.591 (0,744)	6.722 (0.063)	7.917 (0.243)	8.618
Q-RATIO1 ²	5.805 (0.830)	5.873 (0.551)	5.571 (0.807)	6.820

¹ ROA1= the ratio of earning before interests and taxes to a firm's assets , advanced by one period.

² Q-RATIO1 = the ratio of the share price to a firm's internal funds per share , advanced by one period.

³ See BOX 1 for the definition of the BB, BNB, NBB, NBNB variables

⁴ In parenthesis the p-values of the Mann-Whitney tests with respect to NBNB coefficient.

The data reveals that ROA advanced by one period is significantly lower in those structures that include a bank as the main blockholder and a non-bank as the second main blockholder. This result

will be confirmed in the following econometric analysis. Once we use market measures of a firm's returns, Q-ratio is lower, although non-significant, in those structures that incorporate a bank, in comparison to the controlling structure NBNB=1.

Once we put together the stake dimension and the return dimension (Table IX), we find that the presence of banks has only relevant effects on a firm's returns in those cases where their combined stake is low. If the stake is higher than the median for the sector (OWN2 HIGH), the costs seem to discourage expropriation, independently of the type of blockholder. Next, once we focus on those firms with banks as main blockholders (columns 1 and 3), we observe that reductions in their blockholder's stake generate a significant reduction on a firm's returns. This is not true when banks are not present in a firm's ownership. The combination of results of Table V (low stake for those controlling coalition composed of banks) and Table IX results, leads us to suggest the existence of a negative effect on a firm's returns due to the presence of banks as main blockholders.

Table IX
MEASURES OF A FIRM'S RETURN CONTINGENT ON STAKE AND BANKS' PARTICIPATION

	WITH BANK PRESENCE ROA1¹	WITHOUT BANK PRESENCE ROA1¹	P value⁴	WITH BANK PRESENCE Q1²	WITHOUT BANK PRESENCE Q1²	P value⁴
OWN2³ LOW	6.508	9.231	3.711 (0.000)	5.410	5.389	0.284 (0.776)
OWN2³ HIGH	9.292	8.294	0.887 (0.375)	6.841	7.604	0.571 (0.568)
P-value⁴	2.264 (0.024)	3.480 (0.000)		1.397 (0.162)	0.965 (0.334)	

¹ ROA1= the ratio of earning before interests and taxes to a firm's assets, advanced by one period.

² Q-RATIO1 = the ratio of the share price to a firm's internal funds per share, advanced by one period.

³ OWN2 HIGH (LOW) if the sum of the stake of the two largest stakeholders when it is higher (lower) than the median for the sector.

⁴ In parenthesis the p-values of the Mann-Whitney mean tests .

4. ECONOMETRIC ESTIMATIONS

4.1/ Methodology

The previous descriptive evidence suggests that banks, especially when they hold the main stake in a firm, expropriate minority shareholders.

To investigate this issue in more depth level, we conduct a two-equation estimation on a firm's returns as well as on the main shareholders' stake. We recognize the possible endogeneity between

both variables by allowing each dependent variable in one equation to enter as an independent variable in the other equation. The scheme we have in mind is that shown in Scheme 1.

We measure the stake of two main blockholders in a firm with variable OWN2, which is simply the sum of its stakes. Concerning to firm's returns, we use two measures. Firstly, the ROA, which is the ratio of earnings, before interest, and taxes to a firm's assets. Secondly, the Q-ratio, which is the ratio of the share price to internal funds per share.

We separate the effects of the presence of banks on a firm's ownership and returns by introducing six different dummy variables that are explained in Box II. These variables characterize those different situations where there is a variation in a firm's ownership in such a way that banks become the firm's main blockholders:

Box II

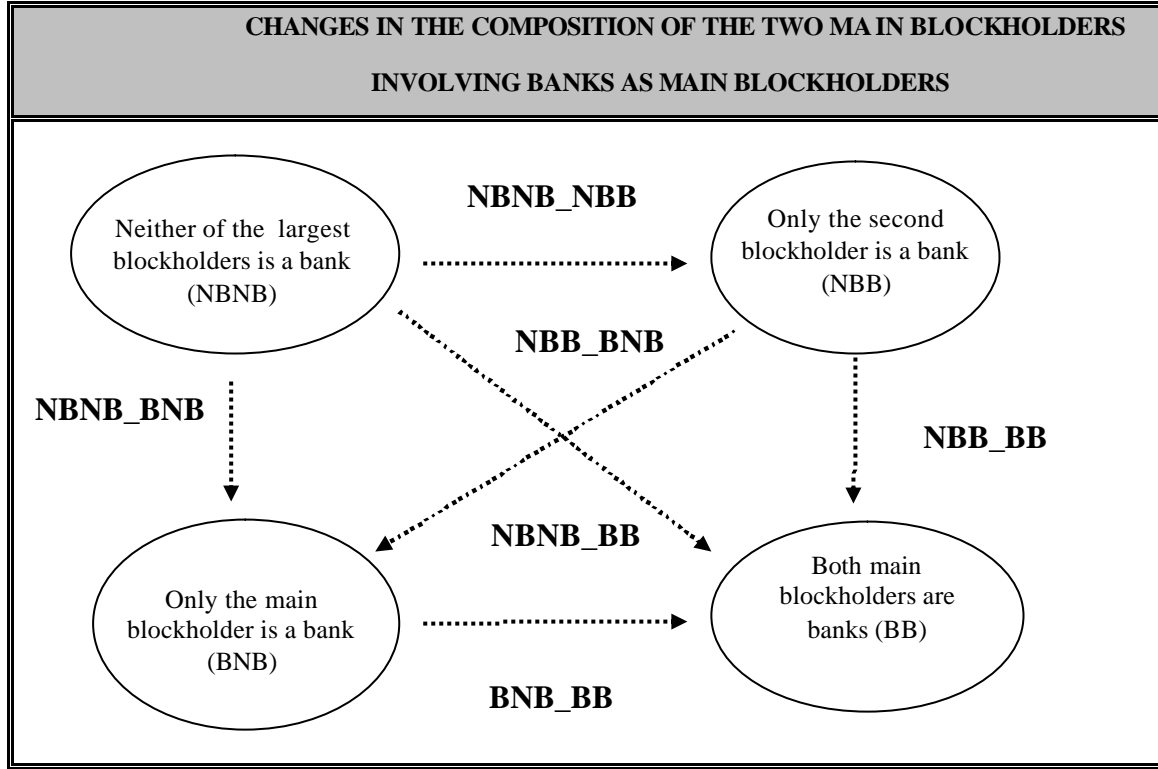
MAIN VARIABLES

NBNB_BB	It is a dummy that is equal to 1 when BB=1 and zero when NBNB=1.
NBNB_BNB	It is a dummy that is equal to 1 when BNB=1 and zero when NBNB=1.
NBNB_NBB	It is a dummy that is equal to 1 when NBB=1 and zero when NBNB=1.
NBB_BB	It is a dummy that is equal to 1 when BB=1 and zero when NBB=1.
BNB_BB	It is a dummy that is equal to 1 when BB=1 and zero when BNB=1.
NBB_BNB	It is a dummy that is equal to 1 when BNB=1 and zero when NBB=1.

See in Box I the definitions of BB, BNB, NBB and NBNB.

With the variables in BOX II, we can study the effects that banks generate contingent on the type of the accompanying blockholders, when the formers buy a significant stake in a firm. We consider six different specifications, one for each variable. They can be summarized in the following scheme:

SCHEME II



Each specification incorporates the same set of control variables that are quite familiar with in this literature (Demsetz and Villalonga (2001); Morck *et al* (1988)).

First, when concentrating on the ten main blockholders, the control variable (BANKSOWN) reflects the bank stake in a firm. This aims to focus those effects on the overall stake caused specifically by changes on ownership by banks. Second, size effects are captured by variable LSALES, which is a measure of a firm's overall sales on a log scale. Third, to control for reputation, we introduce a firm's age (AGE). Fourth, variable INTANG defined as the ratio of intangible assets to total assets as a control for a firm's potential growth. Investment in intangibles is as a major determinant of a firm's returns. We also incorporate a variable of financial structure (DEQUITY) that is defined as the ratio of debt to total assets. Finally, we also introduce temporal and sectorial dummy variables (Dummies). Thus, the specification is as follows:

$$\begin{aligned}
 OWN2_{it} = & \mathbf{a} + \mathbf{b}_1 \left\{ \begin{array}{l} \text{NBNB} - \text{BB} \\ \text{NBNB} - \text{BNB} \\ \text{NBNB} - \text{NBB} \\ \text{NBB} - \text{BB} \\ \text{BNB} - \text{BB} \\ \text{NBB} - \text{BNB} \end{array} \right\}_{it} + \mathbf{b}_2 \text{BANKSOWN}_{it} + \mathbf{b}_3 \text{LSALES}_{it} + \mathbf{b}_4 \text{AGE}_{it} + \\
 & + \mathbf{b}_5 \text{INTANG}_{it} + \mathbf{b}_6 \text{DEQUITY}_{it} + \mathbf{b}_7 \text{ROA}_{it} + \mathbf{b}_8 \text{Dummies}_{it} + \mathbf{h}_i + \mathbf{e}_{it}
 \end{aligned} \tag{1}$$

Where \mathbf{e}_{it} is the error term and has a normal distribution with zero mean and a σ^2 variance.

Variable \mathbf{h}_i accounts for the unobservable heterogeneity.

The previous equation synthesizes the six estimations we carry out.

The second equation, which is linked to the previous one because it incorporates OWN2 as an independent variable, is intended to estimate the effect on a firm's returns when banks buy a significant stake in a firm. The equation we propose is quite similar to the previous one but without introducing BANKSOWN. This allows overcoming potential identification issues. A second remarkable feature is that we advance dependent variable ROA by one period. This is so as to avoid the kind of endogeneity problems that we are going to discuss later. Also, this recognizes the possible temporal lag that can induce a variation in a firm's returns when there is a change in its ownership structure.

Summarizing, the second specification we propose is:

$$ROA1_{it} = \mathbf{a} + \mathbf{b}_1 \left\{ \begin{array}{l} \text{NBNB - BB} \\ \text{NBNB - BNB} \\ \text{NBNB - NBB} \\ \text{NBB - BB} \\ \text{BNB - BB} \\ \text{NBB - BNB} \end{array} \right\}_{it} + \mathbf{b}_2 LSALES_{it} + \mathbf{b}_3 AGE_{it} + \mathbf{b}_4 INTANG_{it} + \mathbf{b}_5 DEQUITY_{it} + \mathbf{b}_6 OWN2_{it} + \mathbf{b}_7 Dummies_{it} + \mathbf{h}'_i + \mathbf{e}'_{it} \quad (2)$$

Where, as equation (1), \mathbf{e}'_{it} is the error term, which has a normal distribution with zero mean and a σ^2 variance. Variable \mathbf{h}'_i accounts for the unobservable heterogeneity.

We have to point out that both estimations are restricted to those firms where the stake of the main shareholders is lower than 50%. The aim is to enrich the problem and avoid situations where there is no need for coalitions in order to control a firm.

There are two additional comments. First, we allow for the existence of some unobservable heterogeneity potentially correlated with independent variables¹³. To overcome this problem we use the within group estimation when the Hausman¹⁴ test reveals the existence of such a problem. We should mention that this source of endogeneity is not observed in any estimation of the OWN2 variable, while it is for the estimations of ROA. This latter result is in accordance with Himmelberg et al (1999).

Second, we allow for a second endogeneity problem. This is linked to the possibility that a firm's ROA drives blockholders to change their stake in a firm. In that case, the estimation of a firm's returns

would be biased. To tackle this problem, which is especially harmful when it is combined with the previous endogeneity problem, we advance variable ROA by one period. Also, for completeness we have conducted endogeneity tests in the OWN2 estimation, with negative results. It is important to test for the existence of endogeneity otherwise the estimation would be inconsistent ¹⁵.

4.2. Results

The results of equation (1) are presented in Table X, while those of equation (2) are shown in Table XI. Focusing on Table X, we separate column 1 from other columns because in the former case, we simply compare, on average, the effects of different ownership structures with that structure that does not involve banks (NBNB). In the remaining columns, there is a *transitional analysis* of specific changes between different ownership structures that incorporate one or two banks as the main blockholders. These situations are described by means of the dummy variables defined in Box II. All estimations have the same control variables described in the methodological part. Finally, we have conducted two types of endogeneity tests. Firstly, Hausman tests to control for the endogeneity linked to the unobservable heterogeneity (fixed effects). Secondly, we implement a Sargan test in the estimations of OWN2 to control for the possible correlation between the error term, not directly linked to the unobservable heterogeneity, and variable ROA of a firm's returns (see footnote 15). In all estimations neither type of endogeneity has been found ¹⁶.

[PUT TABLE X ABOUT HERE]

Column 1 shows that those coalitions with two banks (BB=1) or one bank as one of the main blockholders (BNB=1 or NBB=1 ¹⁷) are associated with lower stake by the two main blockholders in comparison to those other structures without banks (NBNB=1). This is in line with the idea that the presence of banks may generate expropriation and it is optimal for them to reduce their stake as a way to reduce expropriation costs ¹⁸. Also, once we incorporate dummy variables that reflect specific changes in the ownership structure (*transitional analysis*), the results are clearer except for the case NBNB_NBB ¹⁹. This fully supports Hypothesis 1 that postulates lower stake in controlling coalitions with banks in comparison with coalitions without banks

It is interesting to stress that the negative effect on a firm's ownership of the two main shareholders is particularly important in the following cases:

a) When two banks become the main blockholders of a firm that initially did not have banks holding significant stakes (NBNB_BB with a coefficient -23.222).

b) When a bank becomes the main blockholder of a firm that initially did not have banks as their main blockholders (NBNB_BNB with a coefficient -11.520).

These are situations where we expect pronounced eagerness to expropriate minority shareholders. This will be confirmed later in the estimation of a firm's returns making use of market data (see Table XIII).

Concerning the endogeneity issue, the non-significant result found suggests that variable OWN2 is not going to be significant in the ROA estimations (see Table XI). Also, the results on ROA reveal that firms do not seem to adjust their ownership structure in response to their results (non-significant coefficient of ROA on OWN2 estimations). We should mention that several studies for the USA such as Demsetz and Villalonga (2001) find that firms do in fact change their ownership structure contingent on their return. These studies focus on US-listed companies where it is possible to change conveniently a firm's ownership structure with low liquidity costs. In our database there are only 133 of firms (3% of the original sample) that are listed on the stock market. This generates some rigidity that ends up translated as a persistence of ownership structure as time goes by.

Finally, control variables show that banks' ownership appears as part of concentrated ownership structures. This is consistent with the aforementioned idea that banks participate in a firm by playing a controlling role (*i.e.* holding one of the two largest stakes).

The last significant variable is AGE. It shows that older firms have more "diluted" ownership. It seems natural that a firm is initially owned by few and the owners dilute its initial ownership as time goes by.

The estimations on ROA are displayed in Table XI. In all cases we have taken dependent variable ROA advanced by one period as we have explained in the methodological section. We should mention that we have not taken control variable advanced by one period because this may generate additional endogeneity problems. Also, this should introduce an *ad-hoc* asymmetry between these controls and those dummy variables that reflect changes in a firm's ownership structure.

[PUT TABLE XI ABOUT HERE]

The results of Table XI can be summarized as follows:

1) In general, there is a negative effect on a firm's return when a bank becomes its main blockholder. In that case, there are three possible ways to achieve this position. First, when a bank is the second main shareholder and remains so in this position, while another bank buys the firm's main stake (NBB_BB). Second, when initially there are no banks as main blockholders and a bank becomes

the main shareholder (NBNB_BNB). Last, when the second main shareholder is a bank which then buys the largest stake (NBB_BNB). In the aforementioned situations, the first generates more negative effects than the second on a firm's returns (coefficient of -.142 for NBB_BB, versus -.068 for NBNB_BNB), while the third has no impact. Thus, it seems that combined with the negative effect of the presence of banks as the main shareholder, there is a second effect that is linked to the structure (homogeneous or heterogeneous) of the controlling group. When the change is from a heterogeneous structure to a homogeneous one (NBB_BB), the effect is more negative than when the change is from a homogeneous to a heterogeneous one (NBNB_BNB). Thus, homogeneous structures are the more potentially expropriating. This fully supports hypothesis 2A and 2B. We should mention that all these effects are present only in the period after changes in the ownership structure but not present in the period when they are changed ²⁰.

2) We find a non-significant linkage between ROA and OWN2. This confirms the result found in the OWN2 estimation (Table X), revealing that firms do not adjust optimally their ownership structure²¹. Thus, it makes sense for banks to shape that structure to their own advantage at the expense of minority shareholders. Interestingly, this effect holds even when we introduce control variable OWN2. This means that the negative impact of banks on a firm's returns does not rely on reductions in the controlling stake. It is the very presence of banks in a firm's controlling coalitions what generates such a negative outcome. And, this is particularly relevant when a bank becomes the main shareholder of a firm that has as another bank as the second main shareholder. This is the main argument of the article ²².

3) When we compare the situation (NBNB_BNB) with that (NBB_BNB), the coefficient is only negative in the first type of change. This reveals two things: first, the presence of a bank as the main shareholder is especially harmful when initially there were not banks as blockholders. Second, when the main blockholder sells its stake to a bank that is the second main blockholder, this seems to reveal that this bank was already expropriating the minority as the second main blockholder. In this case this change in the ownership structure does not produce any effect on ROA.

4) The incorporation of a bank as a firm's blockholder has only non-negative effects on returns when it holds the second largest stake. This is in accordance with the aforementioned study of Boehmer (2000) making use of a sample of German bidder firms. He finds that takeovers only increase the value of an acquiring firm that has banks as blockholders, if bank control is counterbalanced by another large shareholder.

5) Advancing the results of market data (see Table XIII), when two banks become simultaneously the two main shareholders, there is a contemporaneous ²³ reduction in a firm's market

return. Markets react “immediately” and significantly to this particularly bad combination of shareholders.

6) Finally, concerning control variables:

- a) There is a significant effect of AGE. Older firms show more ROA. This is consistent with what we found in the OWN2 estimations where older firms have more diluted ownership.
- b) Size has a negative or a non-significant effect on ROA. This result may be justified by invoking information asymmetries linked to big firms.
- c) Leverage plays a positive or non-significant effect on a firm’s ROA. Free cash-flow theory of Jensen (1986) may justify this result as debt reduces the scope for managers to divest funds.

From this result that demonstrates the banks expropriating behavior when they hold controlling stakes, we can recommend the use of retribution mechanism like share buy-backs to improve a firm’s efficiency. This is an attempt to buy shares from banks and distribute them to other types of blockholders or put them on the stockmarket. Preferably these other types of blockholders should be other firms with unrelated activities and/or listed ones. Interestingly Yeo *et al.* (2002) finds a strong positive relationship between external unrelated blockholdings and earnings informativeness, which is a signal of blockholders low expropriating intentions. Also, Graham Jr and Lefanowicz (1999) shows that there is not a wealth transfer from the minority to the majority owners when blockholders are other publicly-traded companies. Thus, using share buy-backs is a natural way to promote market mechanism for corporate control that has been shown to be an effective means of reducing agency costs as Weir *et al.* (2002) shows for UK.

5. ROBUSTNESS ANALYSIS: MARKET DATA

To check the robustness of the previous results, we carry out a similar study but focusing on listed firms. This allows us to use market measures of a firm’s returns instead of accounting measures. In particular, the variable we use, Q, is defined as the market-to-book ratio (Q-ratio).

Table XII shows the results of the estimation of the stake of the two main blockholders while in Table XIII we show the results of the determinants of a firm’s market returns. Due to the restricted number of listed firms, in some cases we conducted maximum-likelihood estimations (NBNB_BB) or simple regressions (NBNB_BNB, NBNB_NBB) instead of random-effect estimation. Also, in order to keep as many firms as possible (we have 133 listed firms), we have not rule out those firm where their largest stake is higher than 50%. This does not change substantially our sample as listed firms have diluted ownership (OWN2 has an average of 29.07%), and the stake of the main shareholder in almost all of them is lower than 50% (in 90% of the cases).

We treat the endogeneity issue in the usual way. First, we have conducted Hausman tests to check for the existence of unobservable heterogeneity correlated with independent variables (fixed effects). Second, contingent on the previous results, we have implemented tests of endogeneity not related to the unobservable heterogeneity. This latter test reveals the non-existence of such a problem²⁴.

[PUT TABLE XII ABOUT HERE]

Table XII shows that banks as blockholder have, in general, negative effects on two main shareholders' stake. This is especially true when a bank holds the largest stake and not the second-largest one. However, different from the analysis using accounting data, in some specifications the coefficients are not significant. This is far from surprising, as listed firms have more diluted ownership than non-listed ones. In that case, the controlling group's stake is quite low, and further reductions in that stake are less instrumental in reducing expropriating costs.

The analysis of a firm's returns with the market-to-book ratio (Table XIII) reveals that a bank as controlling blockholder has a negative effect on the market-to-book ratio, in those cases where there is also reduction in a firm's controlling stake:

First, when two banks buy the controlling stake of a firm without banks as its main shareholders (NBNB_BB), we find that markets react in the same period of the change in the ownership structure. We interpret this feature as a strong negative signal of potential expropriation risks. And, accordingly, markets react "quickly".

Second, there is also a negative reaction when a bank becomes the main blockholder of a firm without banks as blockholders (NBNB_BNB). In that case the effect on returns emerges in the next period.

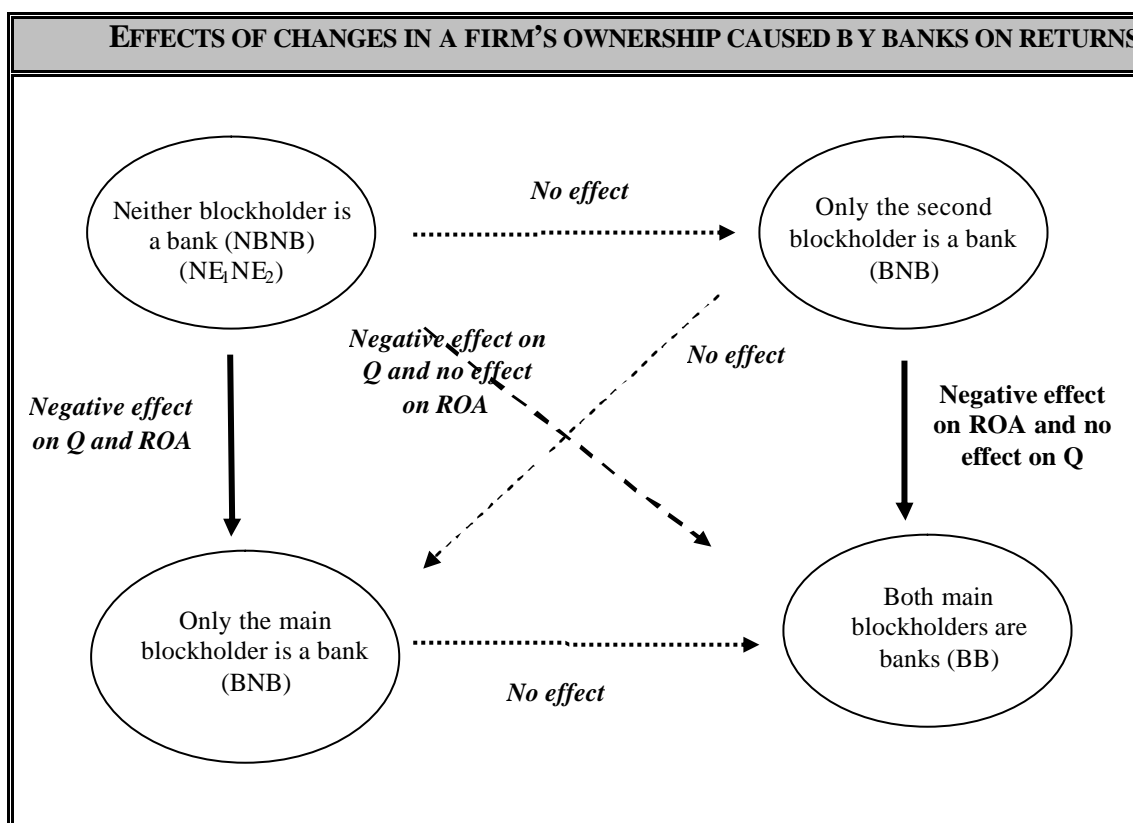
Some final comments concerning control variables are pertinent. First, some specifications show that smaller firms show a superior Q-ratio value (growth-firms with a high Q-ratio tend to be small). Second, there is a weak negative effect of the stake of the two main blockholders on a firm's return. This does not coincide with the non-significant effect found using accounting measures. This result may be explained in terms of the lower stake in the hands of the two largest shareholders of listed firms (29.07%) in comparison with non-listed ones (80.92%). As OWN2 increases and approximates to 50%, there is more expropriation and, consequently, lower returns. Finally, we find some evidence of a negative impact of leverage on the Q-ratio. There is a wide amount of literature that shows a

negative relationship between a firm's growth (positively related with Q-ratio) and its leverage. This is based on asset substitution problems.

PUT TABLE XIII ABOUT HERE

As a synthesis, we can draw the following figure

SCHEME III



Finally, a relevant comment is in order. We can ask why there is so low proportion of firms with banks as the main blockholders (2,76% as the two largest blockholders) given our results. We can give two answers. First, a large proportion of firms in our sample are non-listed and small companies. This is the kind of illiquid asset highly penalized by bank regulation to invest in. Second, the incumbent blockholder (if not a bank), knows that banks are going to pursue their own private benefits. This makes that leading blockholder particularly wary about banks stockholdings.

6. CONCLUSIONS

In this article, we have studied how the returns of a firm are affected by having banks as blockholders. We also have studied the stake of controlling coalition containing banks as well as the types of other blockholders they are more likely to collude with in order to control a firm.

Our premise is that when financial institutions are the main blockholders they tend to expropriate a firm's minority, especially when they collude with other financial institutions to achieve control. We base this statement on three factors. First, there is a natural convergence of interests when blockholders are homogeneous (*i.e.* banks). In that case, they can easily reach agreement on those specific actions required in order to enjoy private benefits at the expense of the minority. Second, banks as main blockholders have the possibility to choose from a wide range of actions in order to expropriate the minority. This facilitates the implementation of these actions. Third, banks may control a firm without owning large stakes. This is because they may represent other shareholders. This feature allows banks to impose a particular type of expropriating action and internalize low cost when there is disagreement with other secondary blockholders.

The previous statement contains two basic hypotheses. First, there is a negative impact on a firm's returns when banks participate as main blockholders in controlling coalitions. And, this effect is particularly damaging when banks collude with one and other. Second, consistently with the previous hypothesis, we expect that a firm's controlling stake would be lower when the main blockholders are banks. Also, related to this latter result, we have argued that banks are more likely to take part in controlling coalitions with other banks rather than with other types of blockholders. Finally, we introduce some additional statements concerning the distribution of the stakes within a firm's controlling coalitions.

To test the previous hypotheses, we carried out an empirical study with a panel data sample of Spanish firms that covers the period 1996-2000. This sample is extracted from the database SABE that is collected by Bureau Van Dijk. The results we find can be summarized as follows:

1) There are two cases when banks on becoming blockholders generate negative returns. First, when a bank buys the main stake in a firm; this effect is particularly strong when the second main blockholder is also a bank. Second, when two banks together become the main blockholders of a firm that did not initially had banks as main blockholders. We should stress that this latter result is only found when we measure a firm's returns making use of market data.

2) When a bank buys the second-largest stake of a firm, it does not generate any negative effect on a firm's returns. This is independent of who the main blockholder is.

3) The controlling coalitions that incorporate banks have lower stakes than those without banks. This feature is particularly significant when a bank is the main blockholder.

4) Finally, banks tend to appear together with other banks as a firm's main blockholders. And, in these kinds of structures, we observe a symmetrical distribution in their stakes.

Previous results confirm our principal statement: a bank generally expropriates minority shareholders. This is true when it is a firm's main blockholder and especially so when it acts accompanied with other banks. The presence of banks has no negative effects on a firm's returns, only when it is the second-largest blockholder in a firm that does not have a bank as the main blockholder.

We feel confident that these results are valid because they are robust to accounting measure as well as market measures of a firm's returns. However, one major drawback in our paper is that it does not address the question of indirect participations. This provides a blurred image of what the "real" ownership structure is. We should mention that it is quite common in Spain to find indirect participations of banks in different firms. Interestingly, this feature reinforces our main result because even underestimating expropriation costs by focusing on direct participations, banks follow value-destroying expropriating policies.

Finally, some political recommendations can be extracted from our paper. First, firms should try to promote heterogeneity in the types of controlling blockholders. Second, they should try avoiding banks. Third, it is better to use share buy-backs instead of dividends as a retribution mechanism. This allows firms to buy stakes from one type of blockholders and distribute them to another type of blockholders or float them in the stockmarket. The investigation of the efficiency of this measure will be the subject of future research.

TABLE X
EFFECTS ON OWNERSHIP CONCENTRATION

	OWN2 ¹	OWN2 ¹	OWN2 ¹	OWN2 ¹	OWN2 ¹	OWN2 ¹	OWN2 ¹
BB	-18.813 ^{***} (3.503)						
BNB	-12.036 ^{***} (2.337)						
NBB	-3.422 ^{**} (1.704)						
NBNB_BB		-23.222 ^{***} (5.182)					
NBNB_BNB			-11.520 ^{***} (3.420)				
NBNB_NBB				-2.724 (1.880)			
NBB_BB					-6.958 ^{***} (1.481)		
BNB_BB						-6.293 ^{***} (1.639)	
NBB_BNB							-11.418 ^{***} (1.688)
BANKSOWN	0.380 ^{***} (0.083)	0.238 ^{**} (0.135)	0.381 ^{***} (0.135)	0.309 ^{***} (0.121)	0.204 ^{**} (0.098)	0.296 ^{***} (0.059)	0.813 ^{***} (0.113)
LSALES	-0.141 (0.115)	-0.128 (0.126)	-0.106 (0.121)	-0.118 (0.124)	-0.481 (0.330)	-0.014 (0.145)	-0.227 (0.252)
AGE	-0.166 ^{***} (0.046)	-0.157 ^{***} (0.048)	-0.163 ^{***} (0.048)	-0.170 ^{***} (0.048)	-0.229 [*] (0.127)	0.021 (0.099)	-0.156 (0.103)
INTANG	-6.319 (4.421)	-5.490 (4.511)	-5.566 (4.498)	-6.098 (4.472)	16.247 (20.320)	9.749 (21.328)	-50.107 (31.587)
DEQUITY	0.366 (1.033)	0.255 (1.057)	0.409 (1.052)	0.303 (1.051)	-0.650 (3.485)	1.712 (3.303)	7.118 (5.303)
ROA	1.292 (2.292)	1.235 (2.406)	1.073 (2.378)	1.602 (2.386)	13.365 [*] (7.674)	-10.699 [*] (6.692)	2.937 (6.227)
Fitness of the model ²	87.16 (0.000)	3681.43 (0.000)	3695.52 (0.000)	3707.88 (0.000)	66.44 (0.000)	297.55 (0.000)	90.58 (0.000)
Hausman Test ³	18.26 (0.57)	5.26 (0.999)	26.50 (0.117)	11.46 (0.933)	3.84 (0.986)	17.35 (0.137)	19.75 (0.138)
Endogeneity Test ⁴	13.54 (0.887)	14.48 (0.697)	14.20 (0.716)	13.77 (0.797)	-6.11 (1.000)	-2.60 (1.000)	15.28 (0.431)
R ²	2.94	2.037	2.14	1.698	31.27	70.574	61.58
Observations	3301	3183	3218	3214	83	87	118

¹***p-value 0.01, ** p-value 0.05, *p-value 0.10. In parenthesis Standard Deviations. See the definition of the variables in the text.

² X² statistics and p-values of fitness of the model tests.

³ X² statistics and p-value for the Hausman Test.

⁴ X² statistics and p-value for the Sargan Test (p-value>0.10 reveals that there is no endogeneity).

TABLE XI
EFFECTS ON RETURNS

	ROA1 ¹	ROA1 ¹	ROA1 ¹	ROA1 ¹	ROA1 ¹	ROA1 ¹	ROA1 ¹
BB	-0.011 (0.044)						
BNB	-0.032 (0.027)						
NBB	-0.018 (0.021)						
NBNB_BB		-0.055 (0.078)					
NBNB_BNB			-0.068 ^{**} (0.036)				
NBNB_NBB				-0.002 (0.023)			
NBB_BB					-0.142 ^{**} (0.058)		
BNB_BB						0.047 (0.035)	
NBB_BNB							0.027 (0.021)
LSALES	-0.004 (0.004)	-0.004 (0.005)	-0.003 (0.005)	-0.005 (0.005)	-0.029 ^{**} (0.013)	0.009 (0.008)	0.006 (0.005)
AGE	-0.010 [*] (0.006)	0.010 [*] (0.006)	0.010 [*] (0.006)	0.010 ^{**} (0.006)	-0.005 (0.007)	-0.002 (0.001)	-0.000 (0.000)
INTANG	0.017 (0.067)	0.009 (0.067)	0.014 (0.067)	0.005 (0.067)	2.549 (1.280)	-0.644 (0.895)	-0.393 (0.399)
DEQUITY	-0.020 (0.012)	0.020 (0.013)	0.021 [*] (0.013)	0.022 ^{**} (0.013)	0.144 (0.124)	-0.010 (0.092)	0.014 (0.061)
OWN2	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	-0.012 (0.004)	0.001 (0.001)	-0.000 (0.002)
Fitness of the model ²	1.55 (0.619)	1.42 (0.11)	1.76 (0.028)	1.44 (0.111)	3.14 (0.021)	26.55 (0.03)	47.50 (0.000)
Hausman Test ³	54.41 (0.000)	52.56 (0.000)	54.74 (0.000)	61.72 (0.000)	34.72 (0.000)	5.67 (0.773)	10.62 (0.388)
R ²	2.14	1.841	2.244	1.837	58.249	33.528	24.338
Observations	2362	2272	2300	2298	62	64	90

¹***p-value 0.01, ** p-value 0.05, *p-value 0.10. In parenthesis Standard Deviations. See the definition of the variables in the text.

² Statistics and p-values of fitness of the models. In the fixed-effect estimation is the F statistics. For the random-effect estimation it is the X² statistics.

³ X² statistics and p -value for the Hausman test.

TABLE XII
EFFECTS ON OWNERSHIP CONCENTRATION FOR A SAMPLE OF SPANISH LISTED COMPANIES

	OWN2 ¹	OWN2 ¹²	OWN2 ¹³	OWN2 ¹³	OWN2 ¹	OWN2 ¹	OWN2 ¹
BB	-16.954*** (5.636)						
BNB	-11.853*** (4.361)						
NBB	-0.416 (3.022)						
NBNB_BB		-12.103* (7.654)					
NBNB_BNB			-18.070*** (6.826)				
NBNB_NBB				5.899 (6.948)			
NBB_BB					-7.137*** (1.808)		
BNB_BB						2.610 (3.080)	
NBB_BNB							-27.008** (5.434)
BANKSOWN	0.044 (0.180)	-0.641** (0.330)	-0.415 (0.333)	-1.342*** (0.387)	0.071 (0.200)	0.657*** (0.136)	1.420*** (0.344)
LSALES	0.137 (0.529)	0.449 (0.722)	2.513 (0.912)	1.393 (1.035)	0.112 (0.543)	-0.037 (0.493)	0.779 (1.017)
AGE	-0.058 (0.104)	-0.049 (0.115)	-0.127* (0.081)	-0.131 (0.112)	-0.125 (0.228)	-0.232*** (0.071)	0.434 (1.151)
INTANG	-24.897 (25.563)	-32.547 (26.872)	-78.481** (36.794)	-22.234 (48.434)	50.094 (42.873)	0.291 (36.993)	114.655 (180.407)
DEQUITY	6.164 (6.746)	8.036 (8.080)	9.662 (10.760)	29.615** (14.222)	-2.985 (3.947)	-4.353 (5.006)	-8.745 (10.693)
ROA	-0.078 (0.223)	-0.084 (0.279)	0.592 (0.411)		0.045 (0.115)	-0.217 (0.263)	-0.019 (0.408)
ROA_1				10.759 (81.470)			
Fitness of the model ⁴	343.95 (0.000)	27.56 (0.069)	3.25 (0.000)	1.96 (0.022)	24.64 (0.055)	393.26 (0.000)	4.20 (0.001)
Hausman Test ⁵	17.38 (0.429)	7.65 (0.937)	19.36 (0.198)	7.61 (0.938)	1.53 (0.998)	-339.74 (1.000)	56.24 (0.000)
Endogeneity. Test ⁶	1.77 (1.000)	12.74 (0.754)	0.66 (1.000)	33.26 (0.007)	0.14 (1.000)	10.34 (0.666)	10.66 (0.384)
R ²	23.42	2.225	29.15	26.37	26.069	80.803	65.990
Observations	216	148	161	111	55	47	68

¹***p-value 0.01, ** p-value 0.05, *p-value 0.10. In parenthesis Standard Deviations. See the definition of the variables in the text.

² Maximum-likelihood estimation (to improve the fitness of the model).

³ Simple regression (to improve the fitness of the model)

⁴ Statistics and p-values of fitness of the models. In the fixed-effect estimation is the F statistics. For the random-effect estimation it is the X^2 statistics.

⁵ X^2 statistics and p-value for the Hausman test.

⁶ X^2 statistics and p-value for the Sargan Test (p-value>0.10 reveals that there is no endogeneity).

TABLE XIII
EFFECTS ON RETURNS FOR A SAMPLE OF SPANISH LISTED COMPANES

Q1	Q ^{1,2}	Q1 ¹	Q ^{1,2}	Q1 ¹	Q1 ¹	Q1 ^{1,3}	Q1 ¹	Q1 ¹	Q1 ¹
BB	-3.709*	1.478							
	(2.349)	(6.584)							
BNB	-0.779	-1.476							
	(1.548)	(4.061)							
NBB	-1.339	-1.229							
	(1.118)	(3.093)							
NBNB_BB			-6.654**	-1.815					
			(3.448)	(2.255)					
NBNB_BNB					-3.120**				
					(1.721)				
NBNB_NBB						-0.540			
						(1.503)			
NBB_BB							1.066		
							(10.070)		
BNB_BB								3.113	
								(3.591)	
NBB_BNB									1.947
									(4.442)
LSALES	-1.765***	-2.614**	-1.908***	0.577*	0.715***	0.404	-6.370**	0.619	-5.567**
	(0.154)	(1.315)	(0.219)	(0.324)	(0.310)	(0.345)	(2.546)	(0.398)	(2.273)
AGE	1.518***	1.920	1.817***	0.006	-0.013	0.007	2.419	-0.116*	2.739**
	(0.545)	(1.942)	(0.615)	(0.033)	(0.028)	(0.032)	(1.808)	(0.065)	(1.334)
INTANG	16.493	-32.866	5.684	-8.477	-14.661	0.753	-44.023	-78.269	94.962
	(10.580)	(55.309)	(11.786)	(17.916)	(16.896)	(17.486)	(451.470)	(72.460)	(412.602)
DEQUITY	3.677	-16.738**	3.175	-5.836*	-5.758*	-5.556	-16.455	-13.514	-21.325*
	(2.708)	(7.784)	(3.518)	(3.646)	(3.547)	(3.589)	(16.071)	(8.691)	(12.734)
OWN2	-0.024	-0.094	-0.043	-0.051*	-0.049*	-0.018	-0.754	-0.228*	-0.176
	(0.033)	(0.094)	(0.041)	(0.030)	(0.030)	(0.029)	(0.801)	(0.119)	(0.166)
Fitness of the model ⁴	14.87	2.85	9.19	37.85	28.53	22.24	2.98	32.13	4.31
	(0.000)	(0.002)	(0.000)	(0.002)	(0.027)	(0.136)	(0.055)	(0.002)	(0.005)
Hausman Test ⁵	71.76	28.71	41.12	5.14	4.51	14.99	17.65	9.72	29.83
	(0.000)	(0.014)	(0.000)	(0.953)	(0.972)	(0.242)	(0.024)	(0.205)	(0.000)
Endogeneity Test ⁶	8.50		0.98						
	(0.862)		(0.999)						
R ²	65.026	36.614	63.840	11.893	15.584	3.137	70.426	53.07	65.722
Observat.	216	144	148	94	106	108	38	36	50

¹***p-value 0.01, ** p-value 0.05, *p-value 0.10. In parenthesis Standard Deviations. See the definition of the variables in the text.

² This Q-ratio is not advanced by one period

³ Maximum-likelihood estimation (to improve the fitness of the model).

⁴ Statistics and p-values of fitness of the models. In the fixed-effect estimation is the F statistics. For the random-effect estimation it is the X² statistics.

⁵ X² statistics and p-value for the Hausman Test.

⁶ X² statistics and p-value for the Sargan Test (p-value>0.10 reveals that there is no endogeneity).

FOOTNOTES

- ² Since the original paper of Berle and Means (1932) there have been a vast amount of papers that have studied different types of ownership structure and their impact on a firm's performance.
- ³ As financial institutions we denote banks as well as Saving & Loans.
- ⁴ Zoido (1998) finds no relationship using accounting measures, while a positive relationship using market data.
- ⁵ These authors find a negative relationship when banks' ownership is not quite high.
- ⁶ This study shows that banks use their bargaining power to charge above market rates from those bank-participated firms.
- ⁷ Zoido (1998) finds a non-significant relationship when accounting measures are used, but a positive relationship when market measures are used.
- ⁸ This author finds a positive relation for independent Japanese firms, but this is not the case for firms that are members of corporate groups (keiretsu).
- ⁹ Financial firms are omitted, as well as those that show inconsistencies in their balance sheet.
- ¹⁰ We denote the two largest blockholders as controlling blockholders henceforth.
- ¹¹ In our sample, family firms are underrepresented. The "problem" is that many families participate indirectly in a firm's ownership through the stakes in other firms. Our focus on direct participation generates and overrepresentation of other firms' stakes and underrepresentation of family firms.
- ¹² Henceforth, we use the word banks to refer to financial institutions (banks and Saving & Loans).
- ¹³ If the unobservable heterogeneity is correlated with explanatory variables, we have to perform a fixed-effects estimation. But, if is not correlated with the explanatory variables, unconditional inference like that of the composed error method (random effects) is the most efficient alternative (Arellano and Bover, 1990).
- ¹⁴ The Hausman test studies whether systematic differences exist between those coefficients of the fixed-effect estimation and those of the random-effects estimations. Particularly, the null hypothesis is that coefficients in both models have no systematic differences. If this null hypothesis is rejected, the only consistent estimator is the fixed-effects one. If not, the best alternative to use is the random-effect estimation.
- ¹⁵ The way we implement this is by testing systematic differences in the coefficients of two estimations on OWN2. First, an equation where the potential endogenous variable (ROA) is lagged by one period (the instrument). Second, an equation without instruments. If the test of the difference between both sets of coefficients is different from zero, in that case there is endogeneity. We should mention that if the first type of endogeneity exists (this is not our case), the test is the same but the equations are different. The first equation includes variables in differences and the potential endogenous variable (ROA) is lagged by two periods (note that variables in differences include those lagged one period). The second equation just incorporates variables in differences.
- ¹⁶ Also, we have conducted tests of multicollinearity with negative results.
- ¹⁷ For coalition NBB=1 the coefficient is less negative than that of BB=1 and BNB=1 coalition types. This is consistent with ROA estimations, where transitional analysis shows only effects for BB=1 and BNB=1.
- ¹⁸ We have also conducted different estimations making use of the stakes of different large blockholders as the dependent variable. The results do not change from those shown in Table X.
- ¹⁹ Consistently with this non-significant result on NBNB_NBB, in the ROA estimation we are going to see that there is no effect on a firm's returns when a bank enters as a second main blockholder in a firm without banks as main blockholders.
- ²⁰ When we analyze a firm's returns making use of market data (Table XIII), the effects are significant in the same period for some estimations.
- ²¹ In the OWN2 estimation this was reflected in the non-endogenous outcome of ROA.
- ²² We should mention that the non-significant effect of concentration (OWN2) on a firm's ROA is consistent with other studies like Demsetz and Villalonga (2001). However, these authors justify this result by invoking endogenous issues.
- ²³ In that case the variable that measures a firm's returns is not lead one period.
- ²⁴ The only exception is the case NBNB_NBB in Table XII.

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